Product datasheet

Specifications

Control relay, TeSys Deca, 5NO, <=690V, 115V AC standard coil, snap-in terminals

CAD50AFE7

Main

Range	TeSys
Product name	TeSys CAD
Product or component type	Control relay
Device short name	CAD
Contactor application	Control circuit

Complementary

Utilisation category	AC-15 AC-14 DC-13
Pole contact composition	5 NO
[Ue] rated operational voltage	<= 690 V AC 25...400 Hz
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	115 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
[Ith] conventional free air thermal current	10 A (at 60 °C)
Irms rated making capacity	140 A AC 250 A DC
[Icw] rated short-time withstand current	100 A - 1 s 120 A - 500 ms 140 A - 100 ms
Associated fuse rating	10 A gG conforming to IEC 60947-5-1
[Ui] rated insulation voltage	690 V conforming to IEC 60947-5-1
Mounting support	Rail Plate
Connections - terminals	Snap-in terminal 1 cable(s) 0.5…4 mm²flexible without cable end Snap-in terminal 2 cable(s) 0.5…4 mm²flexible without cable end Snap-in terminal 1 cable(s) 0.5…2.5 mm²flexible with cable end Snap-in terminal 2 cable(s) 0.5…2.5 mm²flexible with cable end Snap-in terminal 1 cable(s) 0.5…2.5 mm²solid without cable end Snap-in terminal 2 cable(s) 0.5…2.5 mm²solid without cable end
Control circuit voltage limits	0.3...0.6 Uc (-40…70 °C):drop-out AC 50/60 Hz 0.8...1.1 Uc (-40…60 °C):operational AC 50 Hz 0.85...1.1 Uc (-40…60 °C):operational AC 60 Hz 1...1.1 Uc (60…70 °C):operational AC 50/60 Hz
Operating time	4...19 ms coil energisation and NC opening 12...22 ms coil energisation and NO closing 4...12 ms coil de-energisation and NO opening 6...17 ms coil de-energisation and NC closing
Mechanical durability	30 Mcycles

Maximum operating rate	180 cyc/mn
Inrush power in VA	70 VA 50 Hz (at 20 °C)
Hold-in power consumption in VA	8 VA 50 Hz (at 20 °C)
Minimum switching voltage	17 V
Minimum switching current	5 mA
Non-overlap time	1.5 ms on energisation between NC and NO contact 1.5 ms on de-energisation between NC and NO contact
Insulation resistance	> 10 MOhm
Mechanical robustness	Shocks control relay open: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks control relay closed: 15 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations control relay open: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6
Height	107 mm
Width	45 mm
Depth	93 mm
Net weight	387 g

Environment

Standards	EN/IEC 60947-5-1 UL 60947-5-1 CSA C22.2 No 60947-5-1 GB/T 14048.5 JIS C8201-5-1
Product certifications	CB Scheme CCC cULus CE UKCA
IP degree of protection	IP2X front face conforming to VDE 0106
Protective treatment	TH conforming to IEC 60068
Ambient air temperature for operation	-40…60 °C 60…70 °C with derating
Ambient air temperature for storage	-60…80 °C
Operating altitude	0...3000 m

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5 cm
Package 1 Width	10.5 cm
Package 1 Length	11.5 cm
Package 1 Weight	407 g
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm

Package 2 Weight	6.42 kg
Unit Type of Package 3	P06
Number of Units in Package 3	240
Package 3 Height	75 cm
Package 3 Width	60 cm
Package 3 Length	80 cm
Package 3 Weight	111.22 kg

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Total lifecycle Carbon footprint	**17 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**3 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.3 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**11 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**1 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
SCIP Number	**B67ac941-f42f-4afd-894a-0b6f9cefde62**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**

Use Longer

Lifetime extension

Repair	**No**

Use Again

Repack and remanufacture

Recyclability potential, in %	**66**
End of life manual availability	**End of Life Information**
Take-back	**Nej**
WEEE Label	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**

Technical Illustration

Assembly's dimensions